

REMARKS/ARGUMENTS

Applicants acknowledge the Office Action dated November 30, 2004 and request reconsideration of the application as amended. Applicants remarks as follow are numbered to correspond to the numbered paragraphs in the Office Action.

1-2. Applicants believe that Claims 3 and 12 as originally filed satisfy the requirements of 35 USC 112 in that the figures of the application identified in those claims are distinct and clear with respect to inclusiveness. Nevertheless, in order to advance the application more quickly, these claims have been amended.

3-16. While Applicants appreciate that the Examiner was detailed in his rejection of Claims 1-4, 6-10 and 12-15, Applicants are quite convinced that the Examiner is mistaken in his understanding of Kotliar (US 5,924,419) and his use of that reference in rejecting the claims as anticipated.

In the first instance, nothing in Kotliar discloses or even suggests the delivery of a nitrogen enriched gas in pulse doses as provided by Claims 1 and 10 – only that the gas is delivered continuously to the user as long as valve 31 is open. Moreover, nothing in Kotliar discloses or even suggests the means of Claims 2 and 9 for selectively delivering either a nitrogen enriched gas or an oxygen enriched gas to the user. It is clear in Kotliar that the oxygen concentrate is always discharged into the atmosphere through outlet 25 and at no time delivered to the user. What Examiner points to as means 37 accomplishing that function cannot be correct. To explain, what is designated in Kotliar at 11 is the intake to the system for ambient air to be processed alternatively through cartridges 20 and 21 to produce a nitrogen enriched gas delivered to surge tank 27 for inhalation by the user. As is clearly described at column 3, lines 49-60, the only function of regulator 37 is to divert some of the nitrogen enriched gas in the surge tank 27 to be redirected through the inlet to increase further the nitrogen concentration. Thus, regulator 37 cannot by any means be used to deliver an oxygen enriched gas to the user, only a nitrogen enriched gas with a higher concentration of nitrogen. Thus, Kotliar neither anticipates nor makes obvious the invention of Claims 2 and 10.

In addition, Applicants contend that the Examiner misunderstands the function of “optional” valve 24 of Kotliar by claiming that valve 24 is used to adjust the enrichment of nitrogen. As it is well known in the art of pressure swing adsorption, valve 24 of Kotliar in the position as shown is a pressure equalization valve to permit pressures in the cartridges 20, 21 to equalize at the appropriate times in the operating cycle, as described for example in cited U.S. Patents No. 4,802,899 (valves 140, 142), No. 5,871,564 (valve 136) and No. 6,558,451 (valves 136ab and 136bc). Kotliar describes valve 24 as optional. Assuming his apparatus works without valve 24, the resulting nitrogen enriched gas is produced at an averaged constant concentration delivered to surge tank 27. With the valve, the average nitrogen concentration may be somewhat more or less, but it nevertheless will still be a constant. Thus, valve 24 cannot be perceived by any reasonable analysis to function as means to adjust the nitrogen concentration as claimed in Claims 4, 6, 13 and 14.

Although Applicants understand pressure swing adsorption apparatus using either two or three adsorber beds, and in fact one of the Applicants had invented highly successful commercial embodiments of both, Claims 3, 7, 12 and 15 are dependent on either of Claims 1 or 9 and therefore must be viewed together with those Claims in examining the claimed subject matter.

17-21. Notwithstanding the Examiner’s rejection of the invention of Claim 8 as obvious and therefore unpatentable over Kotliar, under 35 USC 103, Applicants would again point out that Claim 8 is dependent on Claim 1 and that, when viewed together with the invention of Claim 1 is thus directed to patentable subject matter.

22-23. Applicants appreciate the allowability of Claims 5 and 11. Although not rewritten in independent form on the basis that the claims on which they depend also are directed to patentable inventions, Claims 5 and 11 have been amended to maintain the antecedent basis of their parent claims as amended.

24. The remaining art of record has been considered and while analogous does not render obvious the invention as now claimed whether viewed singly or in combination.

Applicants appreciate the opportunity to call the Examiner but believe that this amendment to the claims and the forgoing remarks fully address the issues raised by the

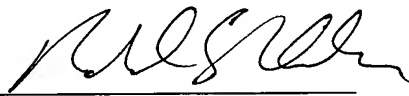
Appl. No. 10/729;507
Amendment dated March 29, 2005
Reply to Office Action of November 30, 2004

Examiner. On the other hand, the Examiner is invited to call the undersigned attorney if he has any matters to address that will facilitate allowance of the application.

Filed with this amendment and response is a petition to extend the time to answer together with the applicable fee to be paid from Deposit Account No.: 50-3010. As the application is now believed to be in condition for allowance, which action is respectfully requested, Applicants respectfully request favorable consideration and the timely issuance of a Notice of Allowance.

Respectfully submitted,

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